



Figure 1

Formal Drawing - Sheet 2 of 4
Title: REFINED PLANT TRANSFORMATION
Applicant: J. Troy WEEKS *et al.*
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Figure 2

CAH	MSSSEVKANGWTAVPVSAKAIVDSLGLKLDVSSYSVEDIAFFPAADKLVAEAQAFVKARLS	60
CAH-H1	MCQNEVEVNGWTSMPADAGAI FDGGPFINVP EALSIEEIKFPVDDPIVEKTMRYAKAALP	60
CAH-H2	-----MSQYGFVRVPREVEKAIP-----VVNAPRPRAVVPFPNSETARLVREYAAKELT	49
	:. *. : * :. . : * :. *	
CAH	PETYNHSMRVFYW-----GTVIARRLLPEQAKDLSPSTWALTCLLHD	102
CAH-H1	TETFNHSMRVYYYGMQDCASHGVLINRSQALGMAITKQQFPKQASALSPSTWALTCLLHD	120
CAH-H2	APVLNHSRLRVFY-----SVAIIRDQFP--AWDLDQEVLYVTCLLHD	89
	. . ***:***: : . . * : : * * * . . :*****	
CAH	VGTAAYFTSTRMSFDIYGGIKAMEVLK-VLGSSTDQAEAVAEAIIRHEDVGV DGNITFL	161
CAH-H1	IGTSDHNLAATRMSFDIYGGIKALEVLK-GFGATSDQAEAVAEAIIRHQDLGVHGTITYI	179
CAH-H2	IATTDKNMRATKMSFEYYGGILSREL VFNATGGNQDYADAVTEAIIRHQDLTGTGYITTL	149
	:.***: : :*:***: **** : *:: *.. * *:***:*****: : * ** :	
CAH	GQLIQLATLYDNVGAYDGDIDFGSWVDDTTRNSINTAFPRHGWCSWFACTVRKEESNKPW	221
CAH-H1	GQLIQLATIYDNVGAHPYVKDFGELIHD TTRSQVHEAHPPGEWRTFFSGVIQKEQAIKPW	239
CAH-H2	GLILQIATTLDNVGSN-----TDLIHIDTVSAINEQFRLHWSLSCFATVVD TENS RKPW	203
	* :*:*** ****: . :. * . : : . * * : * : . : .*: ***	
CAH	CHTTHIPQ-FDKQMEANTLMKPWE	244
CAH-H1	CHTKKMVN-VLRKGSRHPDGO---	259
CAH-H2	GHTSSLGDDFSKKVICNTFGYN--	225
	** . : : . : : : .	

Figure 3

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Ubi4      AAGCAAACGGTATAGCAACGGTGTTAACCTGATCTAGTGATCTCTTGCAATCCTTAACGG 60
UbiN      AAGCAAAGGGTATGGCAACTGTGTCACCGCCCTTCGCTG----CGTG-----TTAACGG 50
          *****
          *****

Ubi4      CCACCTACCGCAGGTAGCAAACGGCGTCCCCCTCCTCGATATCTCCGCGGCGACCTCTGG 120
UbiN      CCACCAACCGCAGGTAGCAAACGGCGTGCACCTTCCCGAGATCTCCACAGCGAGGTCTGG 110
          *****

Ubi4      CTTTTTCCGCGGAATTGCGCGGTGGGGACGGATTCCACAACCGCGACGCAA-CCGCCTCT 179
UbiN      CTTTTTCCGCCTTCCCG-GAAACCGCGGTGGTTTC---AGCGTGGCGGATTCCCCCTCC 165
          *****

Ubi4      CGCCGCTGGGCCCCACACCGCTCGGTGCCGTAGCCTCACGGGACTCTTTCTCCCTCCTCC 239
UbiN      CACCACCCAACCGC-CATAAATACCAGCCCCACCTCACT---CTCTTTGCATATCCATC 221
          *****

Ubi4      CCCGTTATAAATTGGCTTCATCCCCCTCCTTGCCTC 274
UbiN      CAAATCCCA----GTCCCAATC----- 240
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Figure 4. GUS-expression in *Agrobacterium*-infected alfalfa seedlings

